363.7392
C869x

Digitized by the Internet Archive
in 2016

https://archive.org/details/criteriapollutan00illi

69X
3.7392
69x

Illinois Environmental Protection Agency

Fact Sheet

June 1998

DEPOSITORY
JUN 09
~~MAY 2 7~~ 1999
UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Criteria Pollutants

Q — What are criteria pollutants?

A Criteria pollutants are a group of air pollutants common throughout the nation that can cause health problems. The U.S. EPA has set maximum allowable outdoor air concentration limits known as National Ambient Air Quality Standards (NAAQS) intended to protect everyone, including sensitive individuals such as young children and the elderly. Areas repeatedly violating the standards are considered to have unhealthy air.

Information on Criteria Pollutants

Carbon monoxide **Nitrogen dioxide** **Sulfur dioxide**	Compounds that may result from burning common fossil fuels such as natural gas, petroleum and coal.
Lead	A heavy metal that persists in the environment; it may cause health problems depending on exposure factors.
Ozone	Commonly called smog, ozone develops at ground level when volatile organic compounds and nitrogen oxides react in the presence of sunlight.
Particulate Matter	Dust and other fine particles that can irritate or damage the respiratory system.

Q — Where are these six criteria pollutants found?

A Before NAAQS can be set, much information must be known about a pollutant's health and environmental impacts. Concentrations of these six pollutants were known to be widely present in many parts of the country, particularly in urban areas, at levels considered harmful to health and human welfare at the time the standards were set.

Q — How are criteria pollutants regulated?

A Illinois EPA and U.S. EPA limit emissions from air pollution sources. For example, the U.S. EPA adopts national emissions standards for mobile sources (cars and trucks), while state and local governments adopt and enforce requirements for stationary sources such as steel mills, refineries, and printing plants.

Ozone must be handled differently than the other criteria pollutants since it is not emitted directly. Rather, ozone results when nitrogen oxides and volatile organic compounds react in the presence of sunlight. Consequently, ozone regulations target these contributing compounds rather than ozone itself.

The Illinois EPA issues permits for stationary sources and requires certain practices be followed or that certain levels of control be achieved. Emissions are further controlled through rules in the State Implementation Plan for meeting standards under the federal Clean Air Act.

UNIVERSITY OF
ILLINOIS LIBRARY
URBANA-CHAMPAIGN
STACKS

Other tools that help to reduce air pollutants are:

- The federal Acid Rain Program, which seeks to reduce sulfur dioxide and nitrogen oxide emissions from power plants that burn coal;
- Partners in Pollution Prevention, which encourages companies to substitute nonhazardous or less hazardous substances for hazardous ones in their processes;
- Partners in Clean Air, which urges the public to voluntarily reduce ozone-forming emissions on hot, sunny days most likely to produce excessive ozone.

Finally, most sources of criteria pollutants monitor emissions and report them to the Illinois EPA. The Illinois EPA and local agencies also operate equipment throughout Illinois to monitor levels of criteria pollutants and more than 50 volatile organic compounds. Monitoring stations also help Agency personnel track weather information important to determining air pollutants' movement and predict their concentrations. Information from air monitoring is used to track progress in achieving air quality goals.

Q Have criteria pollutant levels decreased?

A Yes. Monitoring data from 1987–1996 show the following reductions of criteria pollutants:

- Ozone: ↓ 21 percent
- Particulate matter: ↓ 37 percent
- Carbon monoxide: ↓ 49 percent
- Sulfur dioxide: ↓ 28 percent
- Nitrogen dioxide: ↓ 10 percent
- Lead: ↓ 58 percent

? For more information contact:

Illinois EPA, Office of Community Relations
P.O. Box 19276, #5
Springfield, Ill. 62794-9276

☎ Brad Frost
Community Relations Coordinator
217-782-2113

☎ Carol Fuller
Community Relations Coordinator
217-782-5562

Hearing impaired: 217-782-9143.

/ Other AirFacts available:

Nonattainment: Falling Short of Air Quality Standards
Air Quality Monitoring
Hazardous Air Pollutants
Construction Permits
Federally Enforceable State Operating Permits
Clean Air Act Permit Program
Air Terms

Printed by Authority of
the State of Illinois
Sep-98 28881 1000

UNIVERSITY OF ILLINOIS-URBANA
3 0112 049073817